



9-2-04

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1

of 3

Application Number	10/764,294
Filing Date	1/22/04
First Named Inventor	Porter et al.
Group Art Unit	3738
Examiner Name	Unknown
Attorney Docket Number	UNMC/0014
Submission Date	August 31, 2004

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
141	1	PANZA, JULIO A. et al. "Abnormal Endothelium-Dependent Vascular Relaxation in Patients with Essential Hypertension." <u>The New England Journal of Medicine</u> . July 1990, 323(1): 22-27.	
	2	LEVINE, M.D., GLENN N. et al. "Cholesterol Reduction in Cardiovascular Disease." <u>The New England Journal of Medicine</u> . February 1995, 32(8): 512-521.	
	3	WIDLANSKY, MD, MICHAEL E. et al. "The Clinical Implications of Endothelial Dysfunction." <u>Journal of the American College of Cardiology</u> . October 2003, 42(7): 1149-1160.	
	4	ANDERSON, MD, TODD J. et al. "Close Relation of Endothelial Function in the Human Coronary and Peripheral Circulations." <u>J. Am Coll. Cardiol.</u> November 1995, 26(5): 1235-1241.	
	5	RIM, MD, SE-JOONG et al. "Decrease in Coronary Blood Flow Reserve During Hyperlipidemia is Secondary to an Increase in Blood Viscosity." <u>Circulation</u> . 2001, 104: 2704-2709.	
	6	BAYFIELD, MD, MATTHEW S. et al. "Deoxygenated Blood Minimizes Adherence of Sonicated Albumin Microbubbles During Cardioplegic Arrest and After Blood Reperfusion: Experimental and Clinical Observations with Myocardial Contrast Echocardiography." <u>The Journal of Thoracic and Cardiovascular Surgery</u> . June 1997, 113(6): 1100-1108.	
	7	OKUMURA, MD, KEN et al. "Effect of Acetylcholine on the Highly Stenotic Coronary Artery: Difference Between the Constrictor Response of the Infarct-Related Coronary Artery and That of the Noninfarct-Related Artery." <u>J. Am. Coll. Cardiol.</u> March 1992, 19(4): 752-758.	
	8	VOGEL, MD, ROBERT A. et al. "Effect of a Single High-Fat Meal on Endothelial Function in Healthy Subjects." <u>The American Journal of Cardiology</u> . February 1997, 79: 350-354.	
	9	ANDERSON, TODD J. et al. "Endothelium-Dependent Coronary Vasomotion Relates to the Susceptibility of LDL to Oxidation in Humans." <u>Circulation</u> . May 1996, 93(9): 1647-1650.	
	10	CERIELLO, MD, ANTONIO et al. "Evidence for an Independent and Cumulative Effect of Postprandial Hypertriglyceridemia and Hyperglycemia on Endothelial Dysfunction and Oxidative Stress Generation - Effects of Short- and Long-term Simvastatin Treatment." <u>Circulation</u> . September 2002, 106: 1211-1218.	
	11	VINK, H. et al. "Evidence that cell surface charge reduction modifies capillary red cell velocity - flux relationships in hamster cremaster muscle." <u>Journal of Physiology</u> . 1995, 489.1: 193-201.	
	12	LUPATELLI, MD, GRAZIANA et al. "Flow-mediated vasoactivity and circulating adhesion molecules in hypertriglyceridemia: Association with small, dense LDL cholesterol particles." <u>American Heart Journal</u> . September 2000, 140(3): 521-526.	
	13	JOHNSTONE, MD, MICHAEL T. et al. "Impaired Endothelium-Dependent Vasodilation in Patients with Insulin-Dependent Diabetes Mellitus." <u>Circulation</u> . December 1993, 88(6): 2510-2516.	

Examiner

Date Considered

12-11-04

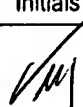

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Application Number	10/764,294
		Filing Date	1/22/04
		First Named Inventor	Porter et al.
		Group Art Unit	3738
		Examiner Name	Unknown
		Attorney Docket Number	UNMC/0014
Sheet 2	of 3	Submission Date	August 31, 2004

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-Issue number(s), publisher, city and/or country where published	T ²
	14	PORTER, MD, THOMAS R. et al. "Improved Myocardial Contrast with Second Harmonic Transient Ultrasound Response Imaging in Humans Using Intravenous Perfluorocarbon-Exposed Sonicated Dextrose Albumin." <u>J. Amm. Coll. Cardiol.</u> May 1996, 27(6): 1497-501.	
	15	JAYAWEERA, ANANDA R. et al. "In Vivo Myocardial Kinetics of Air-Filled Albumin Microbubbles During Myocardial Contrast Echocardiography - Comparison with Radiolabeled Red Blood Cells." <u>Circ. Res.</u> June 1994, 74(6):	
	16	PORTER, THOMAS R. et al. "Inhibition of Carotid Artery Neointimal Formation with Intravenous Microbubbles." <u>Ultrasound in Medicine and Biology.</u> 2001, 27(2): 259-265.	
	17	KELLER, MD, MARK W. et al. "Intraoperative Assessment of Regional Myocardial Perfusion Using Quantitative Myocardial Contrast Echocardiography: An Experimental Evaluation." <u>J. Am Coll. Cardiol.</u> November 1990, 16(5): 1267-79.	
	18	HACKMAN, MD, ANNE et al. "Levels of Soluble Cell Adhesion Molecules in Patients with Dyslipidemia." <u>Circulation.</u> April 1996, 93(7): 1334-1338.	
	19	CARLOS, TIMOTHY M. et al. "Leukocyte-Endothelial Adhesion Molecules." <u>Blood.</u> October 1994, 84(7): 2068-2101.	
	20	CHRISTIANSEN, MB, ChB, JONATHAN P. et al. "Noninvasive Imaging of Myocardial Reperfusion Injury Using Leukocyte-Targeted Contrast Echocardiography." <u>Circulation.</u> April 2002, 105: 1764-1767.	
	21	DE MAN, FRITS H. et al. "Not Acute but Chronic Hypertriglyceridemia is Associated with Impaired Endothelium-Dependent Vasodilation - Reversal After Lipid-Lowering Therapy by Atorvastatin." <u>Arterioscler. Thromb. Vasc. Biol.</u> March 2000, 20: 744-750.	
	22	CELERMAJER, Ph.D., DAVID S. et al. "Passive Smoking and Impaired Endothelium-Dependent Arterial Dilatation in Healthy Young Adults." <u>N. Engl. J. Med.</u> January 1996, 34(3):150-4.	
	23	ESKURZA, MD, IRATXE et al. "Pharmacologic Versus Flow-Mediated Assessments of Peripheral Vascular Endothelial Vasodilatory Function in Humans." <u>The American Journal of Cardiology.</u> November 2001, 88: 1067-1069.	
	24	RUIZ-ORTEGA, M. et al. "Fourth International Seminar on Cardiovascular Biology and Medicine: Part II." <u>Hypertension.</u> December 2001, 38: 1382-1387.	
	25	ABE, YASUNORI et al. "Soluble Cell Adhesion Molecules in Hypertriglyceridemia and Potential Significance on Monocyte Adhesion." <u>Arterioscler. Thromb. Vasc. Biol.</u> May 1998, 18: 723-731.	
	26	NEUNTEUFL, THOMAS et al. "Systemic endothelial dysfunction is related to the extent and severity of coronary artery disease." <u>Atherosclerosis.</u> 1997, 129: 111-118.	

Examiner

Date Considered

12-11-04

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-766-9199) and select option 2.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Application Number	10/764,294
		Filing Date	1/22/04
		First Named Inventor	Porter et al.
		Group Art Unit	3738
		Examiner Name	Unknown
		Attorney Docket Number	UNMC/0014
Sheet 3	of 3	Submission Date	August 31, 2004

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	27	ANDERSON, MD, TODD J. et al. "Systemic Nature of Endothelial Dysfunction in Atherosclerosis." <u>Am. J. Cardiol.</u> February 1995, 75: 71B-74B.	
	28	CORRETTI, MARY C. et al. "Technical aspects of evaluating brachial artery vasodilatation using high-frequency ultrasound." <u>Am. J. Physiol.</u> 1995, 268: H1397-H1404.	
	29	LUNDMAN, MD, PIA et al. "Transient Tryglyceridemia Decreases Vascular Reactivity in Young, Healthy Men without Risk Factors for Coronary Heart Disease." <u>Circulation.</u> November 1997, 96(10): 3266-3268.	
	30	WELLER, PhD., GREGORY E.R. et al. "Ultrasound Imaging of Acute Cardiac Transplant Rejection with Microbubbles Targeted to Intercellular Adhesion Molecule-1." <u>Circulation.</u> July 2003, 108: 218-224.	

Examiner

Date Considered

12-11-04

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Please type a plus sign (+) inside this box → +

1-22-04

PTO/SB/08a (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>			Application Number	Unknown	
			Filing Date	Herewith	
			First Named Inventor	Porter et al.	
			Group Art Unit	Unknown	
			Examiner Name	Unknown	
			Attorney Docket Number	UNMC/0014	
Sheet	1	of	2	Submission Date	January 22, 2004

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	A1	US-4,572,203	02/25/1986	Steven B. Feinstein	
	A2	US-4,718,433	01/12/1988	Steven B. Feinstein	
	A3	US-4,774,958	10/04/1988	Steven B. Feinstein	
	A4	US-5,560,364	10/01/1996	Board of Regents of the University of Nebraska	
	A5	US-5,567,415	10/22/1996	Board of Regents of the University of Nebraska	
	A6	US-5,578,291	11/26/1996	Board of Regents of the University of Nebraska	
	A7	US-5,701,899	12/30/1997	Board of Regents of the University of Nebraska	
	A8	US-5,980,950	11/09/1999	Board of Regents of the University of Nebraska	
	A9	US-6,080,386	06/27/2000	Board of Regents of the University of Nebraska	
	A10	US-6,245,747	06/12/2001	Board of Regents of the University of Nebraska	
	A11	US-6,439,236	08/27/2002	Board of Regents of the University of Nebraska	
	A12	US-6,537,814	03/25/2003	Board of Regents of the University of Nebraska	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁴
		Number-Kind Code ² (if known)				
	B1	EP 0398935 (WO 89/06978) A1	08/10/1989	Schering AG, Berlin und Bergkamen		
	B2	EP 0441468 A2	08/14/1991	Schering AG, Berlin und Bergkamen		
	B3	EP 0458079 A2	11/27/1991	Hoechst Aktiengesellschaft		
	B4	EP 0458745 A1	11/27/1991	Sintetica S.A.		X
	B5	WO 80/02365 A1	11/13/1980	Razor Associates, Inc.		X
	B6	WO 93/17718 A1	09/16/1993	Klaveness et al.		X
	B7	WO 96/07434 A1	03/14/1996	Klaveness et al.		X
	B8	WO 96/39197 A1	12/12/1996	IMARx Pharmaceutical Corp.		X
	B9	WO 97/29783 A1	08/21/1997	Dugstad et al.		X
	B10	WO 99/13918	03/25/1999	University of Pittsburgh		X

Examiner	Date Considered 12-11-04
----------	--------------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 2

of 2

Application Number

Unknown

Filing Date

Herewith

First Named Inventor

Porter et al.

Group Art Unit

Unknown

Examiner Name

Unknown

Attorney Docket Number

UNMC/0014

Submission Date

January 22, 2004

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	1	Villanueva, Flordeliza S. et al. "Albumin Microbubble Adherence to Human Coronary Endothelium: Implications for Assessment of Endothelial Function Using Myocardial Contrast Echocardiography." <u>J. Am. Coll. Cardiol.</u> 1997, 30: 689-93.	
	2	Lindner, M.D., Jonathan R. et al. "Albumin Microbubble Persistence During Myocardial Contrast Echocardiography is Associated with Microvascular Endothelial Glycocalyx Damage." <u>Circulation.</u> 1998, 98: 2187-94.	
	3	Masugata, M.D., Hisashi et al. "Comparison of Microbubble Agents that Produce Different Myocardial Signal Intensity for Quantification of Myocardial Blood Flow by Myocardial Contrast Echo." <u>The American Journal of Cardiology.</u> September 2001, 88: 714-718.	
	4	Phillips, P.J. "Contrast Pulse Sequences (CPS): Imaging Nonlinear Microbubbles." <u>IEEE Ultrasonics Symposium.</u> 2001, 1739-45.	
	5	Venneri, Lucia et al. "Detection of Carotid Artery Endothelial Function with Intravenous Microbubbles." <u>The Online Abstract.</u> 2003.	
	6	Celermajer, David S. "Endothelial Dysfunction: Does It Matter? Is It Reversible?" <u>J. Am. Coll. Cardiol.</u> August 1997, 30(2): 325-33.	
	7	Fisher, MBBS, Nicholas G. et al. "Influence of Microbubble Surface Charge on Capillary Transit and Myocardial Contrast Enhancement." <u>J. Am. Coll. Cardiol.</u> 2002, 40(4): 811-9.	
	8	Kaul, S. "Instrumentation for contrast echocardiography: technology and techniques." <u>Am. J. Cardiol.</u> November 2002, 19(90) Suppl 10A:8J-14J. <u>National Center for Biotechnology Information.</u> 14 April 2003 <wysiwyg://http://www.ncbi.nlm.nih.gov...PubMed&List_uids=12450584&dopt=Abstract>.	
	9	Villanueva, F.S. et al. "Microbubble-endothelial cell interactions as a basis for assessing endothelial function." <u>Echocardiography.</u> July 2002, 19(5): 427-38. <u>National Center for Biotechnology Information.</u> 28 March 2003 <http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12...>.	
	10	Lindner, M.D., Jonathan R. et al. "Microbubble Persistence in the Microcirculation During Ischemia/Reperfusion and Inflammation is Caused by Integrin- and Complement-Mediated Adherence to Activated Leukocytes." <u>Circulation.</u> 2000, 101: 668-75.	
	11	Lindner, M.D., Jonathan R. et al. "Noninvasive Ultrasound Imaging of Inflammation Using Microbubbles Targeted to Activated Leukocytes." <u>Circulation.</u> 2000, 102: 2745-50.	
	12	Klibanov, A.L. et al. "Targeting and ultrasound imaging of microbubble-based contrast agents." <u>Magma.</u> August 1999, 8(3): 177-84. <u>National Center for Biotechnology Information.</u> 28 March 2003. <http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=10...>.	
	13	Lindner, M.D., Jonathan R. et al. "Ultrasound Assessment of Inflammation and Renal Tissue Injury with Microbubbles Targeted to P-Selectin." <u>Circulation.</u> 2001, 104: 2107-2112.	

Examiner

Date Considered 12-11-04

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.